Panel: Agents recommended for evaluation by the IARC Advisory Group

High priority

Acrylamide, furan and 5-(Hydroxymethyl)furfural — commonly found in cooked foods, cancer bioassay data

Aspartame, Sucralose — widespread use and concern over potential carcinogenicity

Beta-carotene — chemoprevention trials provide data on risks of cancer in high-risk groups administered high-doses

Bisphenol A— widely used in epoxy resins and plastics, ongoing cancer bioassay with perinatal exposure

Coffee — numerous case-control and cohort studies published since the IARC Monograph evaluation

Dimethylformamide — widespread contamination in air and water, new cancer bioassay and epidemiological data

Disinfected water used for showering, bathing, swimming, or drinking — ubiquitous exposure, extensive new mechanistic evidence on specific disinfection by-products, including molecular epidemiology studies

Ethyl acrylate— new mechanistic studies warranting a reassessment of the cancer bioassays and their relevance to humans

HCMV (human cytomegalovirus) — herpes virus ubiquitous worldwide, recent human studies of potential role in glioblastoma

Indium-tin oxide — used in production of liquid crystal displays (LCDs) and touch screens, new cancer bioassay and mechanistic data

Iron, dietary and use as supplements— daily iron intake exceeds recommended levels in many women, epidemiological studies of heme iron intake and colon and other cancers

Mate drinking — additional new epidemiological studies of an association with esophageal squamous cell carcinoma

MTBE [methyl tertiary butyl ether], ETBE [ethyl tertiary butyl ether], tert-butyl alcohol— widespread exposure due to use of MTBE and ETBE as fuel additives, cancer bioassay data available

Multi-walled carbon nanotubes — cancer bioassay data available (intraperitoneal injection) or ongoing (inhalation studies), mechanistic similarities with asbestos

Nicotine— increasing population exposure via electronic nicotine delivery systems, recent mechanistic data on DNA damage and other pathways of carcinogenesis

Obesity and overweight —high and increasing prevalence, many epidemiological studies for several cancer types

Phenyl and octyl tin compounds — used as antifouling agents, new cancer bioassay data

Physical inactivity, sedentary work —long-term trends of decrease in physical activity, epidemiologic studies of physical activity and of sedentary work

Opium —addictive narcotic drug, epidemiologic studies several human cancers

Pesticides (including carbaryl, diazinon, lindane, malathion, pendimethalin, permethrin) — current or former wide global use, considerable new epidemiologic and recent high throughput screening data

Red meat and processed red meat—consumed as food worldwide, several epidemiological studies of colorectal and some other cancers

Shift work involving circadian disruption — several new epidemiological studies, including ongoing studies with more detailed information on exposure and cancer outcomes, and extensive new mechanistic data

Styrene —new epidemiological studies and extended follow-up planned, numerous new mechanistic studies

Welding— common workplace exposure, numerous new epidemiological and mechanistic studies
Agents recently tested in cancer bioassays—new bioassay data for several widely used chemicals (including 2-amino-4-chlorophenol, 1-bromopropane, 3-chloro-2-methylpropene, 2-chloronitrobenzene, 4-chloronitrobenzene, 1,4-dichloro-2-nitrobenzene, 2,4-dichloro-1-nitrobenzene, N,N-dimethyl-p-toluidine, isobutyl nitrite, 2-mercaptobenzo-thiazole (MBT), ortho-phenylenediamine dihydrochloride, tetrabromobisphenol a, tungsten)

Medium priority
Acrolein, breast implants, calcium channel blockers, coal dust, hydrazine, lead, metal working fluids, methanol, metronidazole, beta-myrcene, pesticides (including atrazine, chlorpyrifos, DDT, S-ethyl-N,N,-dipropylthiocarbamate, fonofos, glyphosate, pentachlorophenol and 2,4,6-trichlorophenol (EPTC), terbufos), beta-picoline, riddelliine, salmonella typhi and paratyphi (chronic infection), salt, stress, talc, triacrylate, trimethylolpropane, zidovudine (AZT), agents with ongoing cancer bioassays (allyl chloride, anthracene, N,N-dimethylacetamide)